Play Space Maintenance

Alberta

RECREATION AND PARKS

Recreation Development Division

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INTRODUCTION: FOCUS ON THE FUTURE!

If you been reading the focus series on community play spaces, by now you'll have become an "expert" on how to plan and build an effective play space. You'll also realize how much time, material and resources are invested in seeing a vision take shape.

Protect this investment, and ensure the play space will return many years of value! Outline a thorough maintenance program right at the beginning of the project.

In fact, it's never too soon to outline a program! Ideally, maintenance will be part of your initial planning process. Maintenance factors may have quite an impact on your decisions.

What if you're past the planning stage? Even if you have completed construction, or are just now undertaking long-overdue maintenance of an older playground, this manual contains valuable guidelines. It begins by reviewing two important questions: the "why" and the "who" of play space maintenance.

MAINTENANCE: THE REASONS AND THE RESPONSIBILITY

Keeping the play space grounds and the play equipment in top shape is important for the appearance of your community. A dilapidated play space, with swings hanging broken and forlorn and weathered boards dangling from fences detracts from the community. On the other hand, a well-groomed, brightly painted play space is visible proof of your pride in your neighborhood.

Regular maintenance also prevents deterioration, which means higher costs in repairing or replacing facilities later on. In fact, maintenance is essential for the equipment's long-term value and for its play value.

Most important, though, is the safety of your children! Just one loosened bolt on a swing could see a child suffer a tragic fall. Just one jagged piece of glass hidden in a sand play area could slash a young knee. Prevention is the best protection, and it's an important reason for a well-planned maintenance program.

Clearly, maintenance is a long-term proposition. Whose responsibility will it be?

Some responsibility lies with the children themselves. They can and should keep the area clean and tidy. But there are many tasks that are beyond the children's abilities. Who should undertake these?

Here, there are a number of alternatives. Is your community group well-established? Do you feel confident that members will want to be involved in the months and years ahead? Then you may decide to undertake the play space maintenance yourselves.

What if you can't rely on volunteers to have the time, tools, supplies and know-how? You may wish to retain a professional maintenance firm to handle the work. Here, it's wise to obtain quotations from three suppliers. Prepare a written agreement covering what work you expect to have done, and when it will be undertaken.

A second alternative is to involve your municipality. Again, any agreement would need to be worked out well in advance, with the municipality agreeing to maintain the play space your group has designed and built. If it is to undertake responsibility for maintenance, the local authority will want some control over the play space design, equipment selection and construciton. This is understandable. If you plan to involve your municipality in maintenance, meet with representatives at the outset of the project planning stages.

A third alternative may be appropriate if your play space site adjoins a school. In this case, you've probably already worked closely with the principal and the local board. If the school has an outdoor maintenance staff, it may be possible for the school to undertake play space maintenance.

Whichever route you choose, you should take a little time now to learn exactly what's involved in a maintenance program. This manual outlines the weekly, yearly and seasonal requirements for your play equipment and your "grounds".

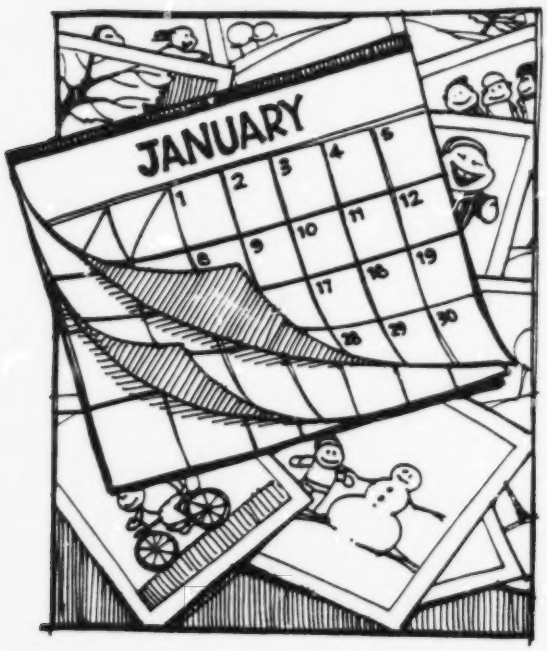
TIME ... TOOLS ... AND THOUGHT!

It's all too easy to underestimate the work involved in a maintenance program. At first, you may think that all you'll need will be a couple of hours, a shovel, rake, oil can and garbage bags.

After taking a closer look at the requirements, you may overestimate the responsibility. Don't be intimidated! While maintenance may involve everything from a paintbrush to a front-end loader,

an action plan will put the challenge back into perspective. It will show you what's required each week, each year, and throughout each season.

Because each play space is unique, this manual outlines general principles for the maintenance of play space areas and play equipment. These principles should be applied to your play space, as your group sets out a maintenance program for each season, for each piece of equipment. Then you can put the programs together in a complete "yearly maintenance calendar".

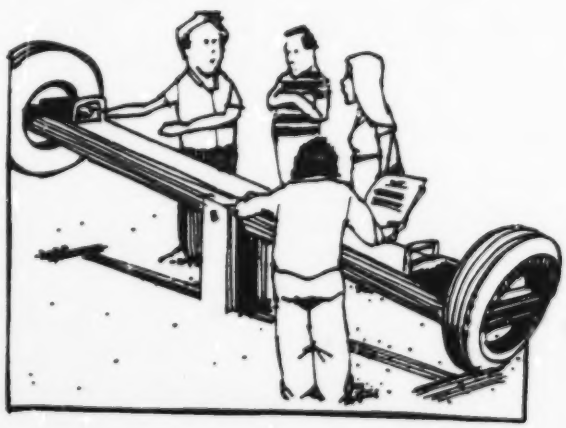


Once this calendar is in place, you'll have the facts you need for your decision on who will be responsible for maintenance. You'll also see how to ensure you have a play space that will stand up to the "test of time".

You'll find it helpful in estimating time, manpower, equipment and tools required. With these facts in hand, you can outline a budget, order materials ahead of time (and perhaps obtain bulk order discounts) and organize your crews.

In the following pages, we've outlined a maintenance program - first by season, then by specific equipment and area. It would be impossible to outline complete maintenance guidelines for every imaginable piece of equipment, so these descriptions are fairly general. To be certain of proper maintenance procedures (and to ensure warranty conditions are met) follow the instructions in manufacturers' specifications.

Keep a permanent record of seasonal inspections, maintenance and repairs. Include dates of servicing, what repair was performed, who did the repair, what parts and labor were involved, and note if any follow-up is required. Note the warranty expiry dates, and any prior inspection required. This record will help in planning future maintenance programs. Also ... better to be safe ... than sued.

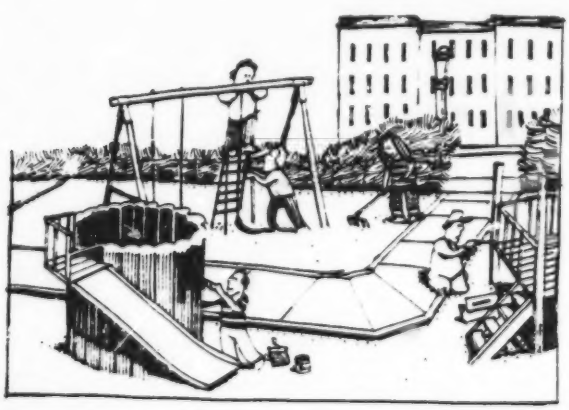


Chances are extremely remote that you'll ever be involved in a legal action, but there have been cases where negligence has been charged as a result of playground injuries. Be sure to keep records as evidence of due care, in case a suit is lodged against you, alleging negligence due to improper management and poor maintenance.

SPRING ... INTO ACTION!

The children in your community will probably be ready to visit the play space before all the snow has gone! You'll have to be quick to be ahead of them, but the first inspection tour of the play space should be done before they arrive.

First, inspect for signs of winter damage. This might include boards which have come loose, paint which has weathered, loose bolts or screws on equipment. Minor repairs may be done "on the spot". Any more serious maintenance work should be noted and listed for the follow-up visit. If there are any dangerous areas - deep pools of standing water or unsafe equipment



- block them off and mark them clearly so that adults and children can avoid the "hidden hazards".

Your second visit may involve a volunteer crew as you ready the play space for the summer season:

- The site - grass should be raked, fertilized and watered; garden areas dug or rototilled, hard-surfaced areas swept; trees and shrubs should be pruned. Look for insects and diseases on plants and turf, as early detection and control are important in preventing damage. Glass, cans, rocks and other debris should be cleared away. Snow fences should be removed and stored. Sand, pea gravel and bark should be raked and cleared of all debris.

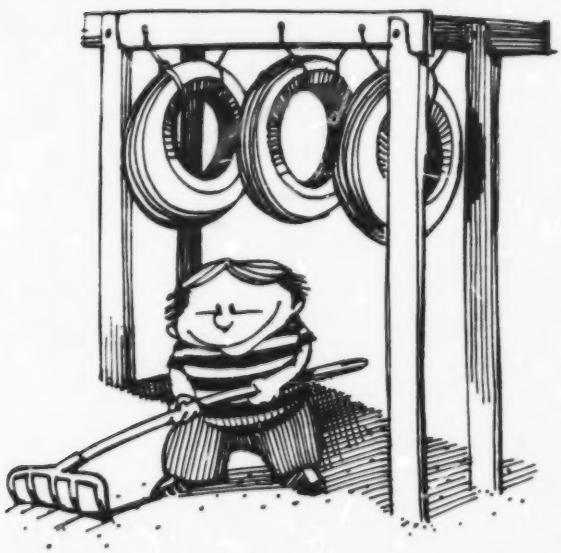
- The equipment - should be examined closely for evidence of damage over the winter. Inspect for signs of wear and tear. Remove, replace or repair broken or worn equipment and equipment parts. Slides and other pieces of metal equipment may need to be sanded and repainted; wood may need to be repainted or restained. All parts which have been stored over the winter (swing seats, smaller pieces of equipment) should be checked and repaired before they're reinstalled. Every nut, bolt and nail should be checked and tightened or replaced. Start, test, then repair mechanical systems which were shutdown over winter. These may include systems for pools, sprinklers, sprays and drinking fountains. Lubrication of all moving parts, even if done the preceeding fall, should be repeated.

Equipment maintenance procedures are often outlined in manufacturer's brochures and should be performed properly in order to meet warranty requirements. Additional maintenance guidelines are described in the "Checklist" section of this manual.

SUMMER: WHEN THE HEAT'S ON!

When school's over for the summer, the pressure's on the play space! Daily useage will be highest in July and August, so maintenance will be a regular requirement.

If the play space is supervised, the leader should involve the children in daily clean-up activities of carrying litter to trash cans. Children can also rake sand areas regularly to remove foreign material such as glass and rocks, and can weed the area if necessary.



Taking part in the care of the play space isn't a hardship. In fact, it can help children to feel the place is theirs to enjoy. A group effort also builds a spirit of team work and cooperation. Even timid children, too shy to join others in supervised play activities, may cheerfully and unselfconsciously take part in clean-up activities.

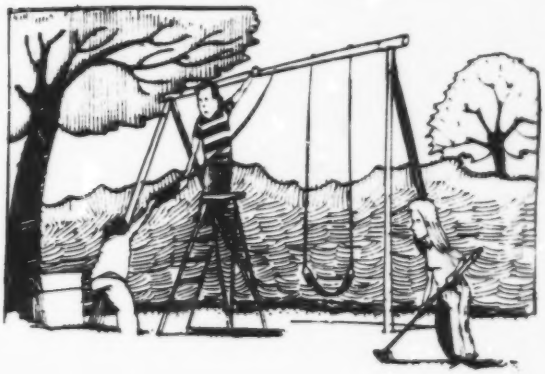
Even so, a complete and regular "adult" maintenance program will be required:

- The site - litter should be removed once a week, and new bags for containers provided. Grass will need watering and mowing from May until fall and should be fertilized in spring and early fall. For large turf areas, a tractor-drawn mower will be essential. Weed control can be undertaken by hand or with herbicides. Be sure to follow manufacturers' instructions or have trained personnel handle herbicide application. Most plants will require frequent watering and insect and weed control. Hard-surfaced areas should be swept regularly. Benches, tables, signs, lights and other site furnishings should be kept in top shape.

- The equipment - must be given a thorough safety check at least once each week. Maintenance must be performed as outlined in the manufacturers' specifications or as described in the Checklist section of this manual.

FALL: MAKE A CLEAN SWEEP!

Most of the major maintenance work should be done in the fall after the trees lose their leaves and before the snow flies. Time spent now in maintaining the site and equipment will save time in the spring. It will also protect your investment!



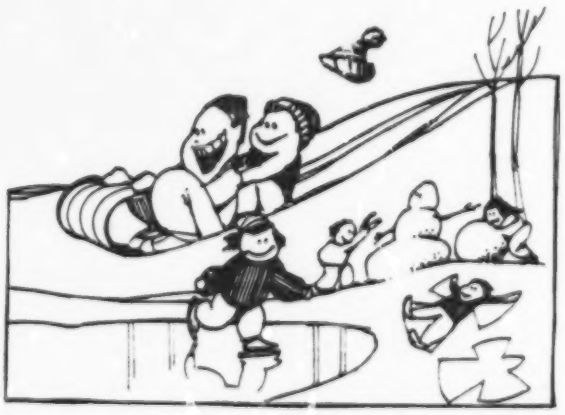
- The site - should be raked, trees and shrubs pruned, gardens cleared and the soil turned over.

- The equipment - small pieces of equipment which are relatively easy to dismantle should be removed and stored. Larger pieces should be checked and maintained according to manufacturers' instructions. All moving metal parts should be greased or oiled to prevent rusting over the winter months. If any wooden pieces have become worn or rough during the summer, they should be sanded and repainted or restained. All water features such as pools, drinking fountains and hand pumps should be winterized. Water lines should be drained and blown dry. Fixtures which protrude should be removed to prevent accidents or vandalism.

WINTER: CLEAR A PATH!

Even when you've planned your play space strictly for summertime activities, it will need some maintenance during the winter months. Snow on adjacent walks must be cleared. Snow in the parking area will need to be shovelled. Litter should be removed each week.

This will be even more important if you've planned the space to offer wintertime activities.

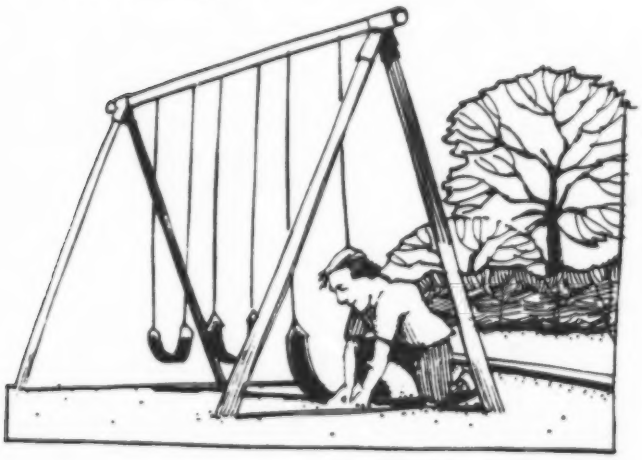


- Sledding - the hill should be checked weekly to ensure site safety. Remove stones and other sharp objectives, especially any objects at the bottom of the run. If heavy activity has exposed grass, it should be recovered with snow to prevent winterkill of turf.

- Skating - maintaining a rink properly can be a full-time responsibility. A fence or enclosure should be erected around the rink in the fall. It should be inspected on a daily basis for protruding nails, broken boards and slivers. In addition to flooding the rink, snow must be removed whenever required. The changing and storage shed should be supervised for safety, and to prevent vandalism.

MAINTENANCE CHECKLIST

1. Swings



Every week:

- Check support frame for wear and tear. Repair or replace if necessary.
- Check seats; replace if broken.
- Replace worn "S" hooks, split links, worn chain.
- Replace worn brushing, swivel pin or cotter pin of each swing bracket.
- Check for squeaky operation: lubricate moving parts as required.
- Tighten all bolts.
- Replace cracked cast iron brackets.
- Rake or shovel sand into depressions and over footings.

Every year:

- Sand and repaint all painted surfaces.
- Replace all damaged components.
- Where wood is used (to replace seats, etc.), sand, prime and paint.

2. Slides

Every week:

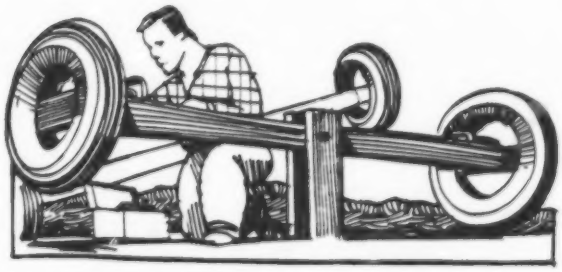
- Check slides for safety to ensure that slide bedway and side screening are free of sharp edges and protrusions.
- Wash slide deck and bed.
- Tighten loose bolts.

- Replace cracked, broken or missing steps, nails and cast iron leg connections.
- Shovel or rake sand over concrete footings.
- Rake impact sand at base of slide.

Every year:

- Sand all painted sliding surfaces.
- Repaint.

3. Teeter-totters



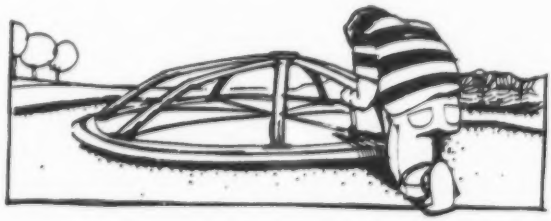
Every week:

- Tighten bolts.
- Replace broken handles and fulcrum bolts.
- Check security chain; replace if necessary.
- Rasp or sand sharp edges and splinters in boards.
- Remove broken, cracked or unsafe boards.
- Shovel or rake sand into depressions.
- If tire or rubber mat is used as a bumper pad, replace or reposition as required.

Every year:

- Test operation to ensure safe separation distance between boards.
- Check boards for wear - sand and repaint or restain where required.
- Replace worn boards or hardware parts.
- Replenish sand at bases.

4. Merry-go-rounds



Every week:

- Check and tighten fittings.
- Grease hub fittings.
- Rake impact sand to fill depressions.

- Check safety bars for stability, tighten or repair if required.

- Check platform deck for wear; sand or rasp all rough areas to remove splinters, then repaint or resand.

Every year:

- Remove merry-go-round platform with front-end loader, transport by truck to covered workshop.

- Tighten all nails, screws, nuts and bolts.

- Sand all surfaces, restain or repaint.

- Grease hub fittings.

- Repair or replace all worn parts.

- Return and install platform on base, replenish impact sand around merry-go-round.

5. Tunnels, Drums, Barrels and Cable Spools

Every week:

- In tunnels, drums and barrels used for crawling, rake sand at base to remove debris and sharp objects.

- Sand or rasp any marks or slivers on wooden barrels and spools.

- Adjust, repair or replace hardware and any connectors to other components.

- File or sand any sharp metal edges, then repaint.

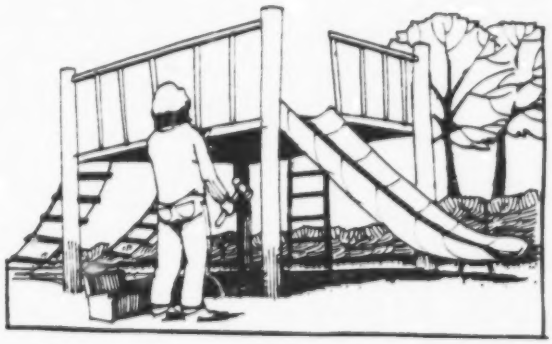
- Replenish sand if necessary.

Every year:

- Repaint exterior and interior, if required.

- Replace sand.

6. Climbing Structures - Multi-Decks, Connectors and Attachments



Every week:

- Sand or rasp marks or slivers on wood surfaces.

- Retouch with stain or paint.

- Replace broken or missing boards, rungs or steps where necessary then stain or paint.

- Check guards, handrails, beams and supports for cracks; repair where required.

Play Sand:

Sand should be raked regularly to remove debris. Special care should be taken to remove broken glass, rocks, plastic items or rusty cans, and reminders left by animals who've visited the sand area. Any necessary repairs should be made to edges of the sand box, and rough wood should be sanded, then repainted or restained.

Each week during the summer the sand should be given a chloride treatment. You'll need:

A 9-litre (2 gallon) watering can

A 9-litre (2 gallon) bucket

220 ml (8 oz) fluid chlorine of lime to 18 litres (4 gallons) of water for every 10 cubic metres (13 cubic yards)

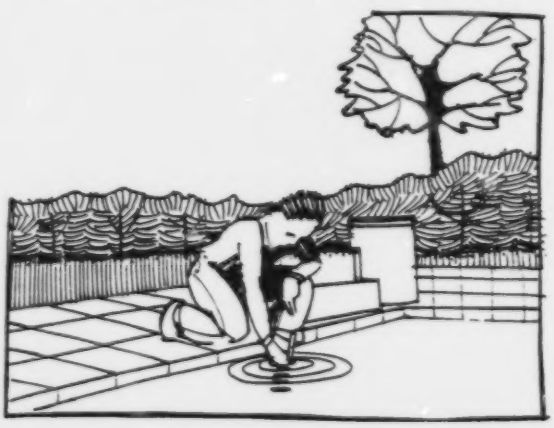
Mix the solution in the bucket and can, then use the can to spray the solution evenly over the sand, refilling from the bucket. After disinfecting the sand, hose it down with clean water to ensure the solution penetrates to the base of the area. Finally, use a shovel to turn the sand to a depth of 19 cm (7 1/2 inches) to speed the drying process.

When the sand becomes too dirty to clean properly, or the level of sand drops below 25 cm (10 inches) replace it with new, clean sand. Rake sand level, and cover concrete footings.

Impact Sand:

Sand used at the base of slides, beneath swings or climbers may become hard-packed or worn away through heavy use. To ensure that this impact sand retains its "cushioning" properties, it should be turned over with a pitchfork each week. It should then be raked to remove any broken glass or other potentially dangerous items. During the summer, sand in these heavy-use areas may need to be replenished.

9. Water Play Areas



- Tighten all nuts, bolts and nails.

- Replace missing hardware if required.

- Check ropes, cables and chains; replace or repair if required.

- Check tires; remove sand and debris from interior. Clear drainage holes if plugged.

- Rake or shovel sand into depressions and cover footings.

Every year:

- Perform maintenance as above.

- If required, sand and restain or repaint structure.

- Replace tires if worn, damaged or burned; replace worn universal joints.

- Check beams and welds of beam supports; tighten beam support bolts.

- Check bridges; if bridge hangs too low, cut off extra links, restretch the bridge, rehang it with new split repair links.

- Sand or rasp marks and rough areas that may cause slivers.

- Rasp and repaint metal components.

- Replenish sand at base.

7. Play Structures - Playhouses, Forts, Storefronts, Etc.

Every week:

- Sweep interior (or ensure children are encouraged to clean up).

- Check door hinges; oil if necessary.

- Check windows; replace broken panes if necessary.

- Check ladders, guards and handrails; replace rungs or other parts if required.

- Check wooden components for wear; sand then repaint or restain where required.

- Tighten or replace hardware, lubricate moving parts.

- Check foundations for rot and looseness.

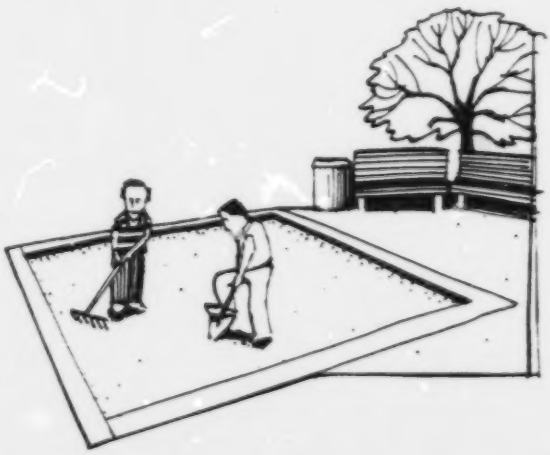
Every year:

- Check structure; repair or replace any worn beams, supports and boards.

- Repaint or restain wooden and metal components.

- Replenish sand at base.

8. Sand Play Areas



Any pool of water, no matter how shallow, must be treated as if it was a full-sized swimming pool. It should be supervised during the day, drained or enclosed and locked when not supervised. For health reasons, standing water must be chlorinated; the pool drained and cleaned weekly; and should be drained and covered during the off-seasons. In the fall, water lines should be drained and blown dry and any protruding hardware removed. Also check for leaks, clogged drains and improper drainage; then repair or replace as required.

Sprinklers/Spray Jets/Fountains:

Drains should be checked and cleared regularly to prevent blockages, and drinking fountains cleared and sanitized. Check spray heads and automatic shut-off controls. Adjust, repair or replace where required. In the fall, winterize lines and fixtures. If sand has been used as a surface around the water play area, it should be raked to remove debris, and replenished when worn away through heavy use. If the surrounding area is a hard surface, sweep and remove debris.

10. Mounds/Amphitheatre

Mow grass at least once a week during the summer growing season. Remove debris such as rocks, stones, bottles from area. Where impact sand is used, turn with a pitchfork each week to prevent the sand from becoming hard-packed. If mounds are used for sledding in winter, check area each week to ensure no sharp objects are left on the runway. Where snow has been worn away, shovel snow over bare spots to prevent grass from suffering winter kill.

11. Adventure Area

Children should accept responsibility for keeping the adventure area clean and storing loose materials in the locked shed when not in use. However, fences should be inspected for wear and tear or vandalism, and repaired where necessary. Check operation of fire extinguisher and be sure first aid kit is in order. Grass should be mowed when required. Unwanted debris (some scrap will be valuable and should be clearly marked) should be hauled away.

Even if not used in winter months, the area should be checked regularly for security purposes.

12. Quiet Retreat

Shrubs should be watered and pruned, any additions such as rocks

or hollow logs should be inspected and repositioned if they have been moved. Grass should be mowed and debris cleared away. Sand and repaint or restain the benches and tables; tighten or replace hardware.

13. Open Green Space

Turf must be maintained throughout the spring, summer and fall with a program of watering, fertilizing, mowing, weed and rodent (gopher) control. Trees and shrubs should be pruned. Check the hardware for removable net/goal posts; repair if necessary. Have line markings on sports fields faded? They will need repainting at least every two weeks, or as required.

14. Natural Area

The area should be toured weekly during all four seasons. Deadfall should be cleared away from paths and trails. To keep paths clear, prune trees and underbrush and repair path surfacing. Streams and ponds should be kept clear of debris, and banks and retaining walls repaired as needed. Where campfires are permitted, fire pits should be cleared out and woodpiles replenished. Picnic tables, stoves and other site furnishings should be refinished and repaired.

15. Garden Area

While children will be working under adult supervision in caring for the garden, there may be times when the garden area is left untended. Provision should be made for "back-up" watering and weeding during the spring and summer. Stepping stones and fencing should be inspected for damage and repaired where required. In the fall, the ground should be turned over after the plants have been removed.

16. Paved Area

Surface should be checked weekly for evidence of cracking or heaving, and repaired as soon as damage is noted. Interlocking pavers may buckle or heave and should be repositioned and tamped to level. Any weeds appearing in the paving are signs that cracks have appeared. The soil should be treated with a sterilant or safe herbicide and the cracks repaired. Repaint lines for court games, repair net/goal post hardware.

17. Service Building

Windows and doors should be checked daily for security purposes. Any damage should be reported and repaired without delay. If building contains washrooms, these should be cleaned and sanitized daily and supplies replenished. Any graffiti should be painted over. In winter, furnace should be checked for safety, and furnace filter vacuumed or replaced.

18. Benches and Bins

Benches should be inspected weekly. Any rough spots should be sanded, then restained or repainted; any broken boards repaired or replaced; screws and nuts tightened. Metal parts should be filed or sanded, then repainted with an all-weather enamel paint. If necessary, dismantle and store benches in the fall.

Litter bins should be emptied weekly (daily during high-use summer periods) and liner bags replaced. Litter bin interior

should be washed with chlorine solution at least once a year; more frequently if necessary.

19. Bicycle Racks, Signs and Lights

Should be checked weekly and loose nuts, bolts and screws tightened. Metal parts should be filed and repainted where worn; wooden components should be sanded and repainted or restained. Signs which fade or are defaced should be repainted. Lamps and covers may need to be repaired or replaced; burnt-out bulbs should be replaced immediately.

FOCUS ON SAFETY!

Your regular maintenance program will add years to the life of your play equipment. It will enhance the look of the play space, will ensure a continuing high level of play value and will contribute to the safety of the play space.

But ensuring that your play space is a "safe" space involves more than a maintenance program. In fact, the topic is important enough that a separate manual in the "FOCUS" series has been developed to help you protect the well-being and security of the children in your community.

If you don't already have a copy, you can obtain one at our Regional Recreation Office, or by contacting Alberta Recreation and Parks at the address given on the back cover of this manual.

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